

Product datasheet

Specifications



Circuit breaker, ComPact NSX100HB2, 100kA/690VAC, MicroLogic 6.2E-M trip unit 50A, 3 poles 3d

LV433346

! Discontinued

! Discontinued on: 13 Nov 2022

! End-of-service on: 30 June 2023

Main

Range	ComPact
Product name	ComPact NSX
Range of product	ComPact NSX100...250
Device short name	NSX100HB2
Product or component type	Circuit breaker
Device application	Motor
Number of poles	3P
Protected poles description	3t
[In] rated current	50 A at 65 °C
[Ue] rated operational voltage	690 V AC 50/60 Hz
Network type	AC
Network frequency	50/60 Hz
Suitability for isolation	Yes conforming to EN/IEC 60947-2
Utilisation category	Category A
[Icu] rated ultimate short-circuit breaking capacity	100 kA Icu at 500 V AC 50/60 Hz conforming to IEC 60947-2 100 kA Icu at 525 V AC 50/60 Hz conforming to IEC 60947-2 100 kA Icu at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Performance level	HB2 100 kA 690 V AC
Trip unit name	MicroLogic 6.2 E-M
Trip unit technology	Electronic
Trip unit protection functions	LSIG
Control type	Toggle
Circuit breaker mounting mode	Fixed

Complementary

[Ui] rated insulation voltage	800 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	8 kV
[Ics] rated service short-circuit breaking capacity	100 kA at 500 V AC 50/60 Hz conforming to IEC 60947-2 100 kA at 525 V AC 50/60 Hz conforming to IEC 60947-2 100 kA at 660/690 V AC 50/60 Hz conforming to IEC 60947-2
Mechanical durability	50000 cycles

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Electrical durability	10000 cycles at 690 V In 20000 cycles at 690 V In/2 30000 cycles at 440 V In 50000 cycles at 440 V In/2
Mounting support	Backplate
Upside connection	Front
Downside connection	Front
Connection pitch	35 mm
Protection type	L : for overload protection (long time) S : for short time short-circuit protection I : for instantaneous short-circuit protection G : for ground fault protection
Trip unit rating	50 A at 65 °C
Motor tripping class	5 10 20 30
Complementary motor protection	Underload Stalled rotor Phase unbalance Protracted starting time
Long-time pick-up adjustment type Ir (thermal protection)	Adjustable 9 settings
[Ir] long-time protection pick-up adjustment range	25...50 A
Long-time protection delay adjustment type tr	Adjustable
[tr] long-time protection delay adjustment range	10 s at 7.2 x Ir for trip class 10 120 s at 1.5 x Ir for trip class 5 20 s at 7.2 x Ir for trip class 20 240 s at 1.5 x Ir for trip class 10 26 s at 6 x Ir for trip class 20 480 s at 1.5 x Ir for trip class 20 5 s at 7.2 x Ir for trip class 5 13.5 s at 6 x Ir for trip class 10 6.5 s at 6 x Ir for trip class 5 30 s at 7.2 x Ir for trip class 30 38 s at 6 x Ir for trip class 30 720 s at 1.5 x Ir for trip class 30
Thermal memory	20 minutes before and after tripping
Short-time protection pick-up adjustment type Isd	Adjustable
[Isd] Short-time protection pick-up adjustment range	5...13 x Ir
Short-time protection delay adjustment type tsd	Fixed
Instantaneous protection pick-up adjustment type Ii	Fixed
[Ii] instantaneous protection pick-up adjustment range	750 A
Ground-fault protection pick-up adjustment type Ig	Adjustable 9 settings
[Ig] ground-fault protection pick-up adjustment range	0.6...1 x In for In = 25 A 0.3...1 x In for In = 50 A 0.2...1 x In for In > 50 A Ig enable on/off
Ground-fault protection time delay adjustment type tg	Adjustable
[tg] ground-fault protection time delay adjustment range	0...0.4 s
Earth-leakage protection	Without
Zone selective interlocking ZSI	With
Number of slots for electrical auxiliaries	5 slot(s)

Local signalling	Flashing LED (green) for ready to operate LED 95 % lth (red) for temperature over set point
Display type	LCD display
Type of measurement	Energy meter
Communication of data	Thermal image function Demand current and power Protection and alarm settings Instantaneous and demand values Power quality Energy metering Phase sequence Time-stamped histories and event tables Maximeters/minimeters Maintenance indicators
Width (W)	105 mm
Height (H)	161 mm
Depth (D)	86 mm
Product weight	2.05 kg

Environment

Standards	EN/IEC 60947
Product certifications	EAC CCC Marine
Overvoltage category	Class II
Electrical shock protection class	Class II
Pollution degree	3 conforming to IEC 60664-1
IP degree of protection	IP40 conforming to IEC 60529
IK degree of protection	IK07 conforming to IEC 62262
Ambient air temperature for operation	-25...70 °C
Ambient air temperature for storage	-40...85 °C
Relative humidity	0...95 %
Operating altitude	0...2000 m without derating 2000 m...5000 m with derating

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	13.5 cm
Package 1 Width	10.8 cm
Package 1 Length	19.2 cm
Package 1 Weight	1.89 kg

Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



Environmental footprint

Total lifecycle Carbon footprint	58 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	10 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.4 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.2 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	47 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.3 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

SCIP Number	811c5f45-220d-4e22-b512-f9d771b72680
EU RoHS Directive	Compliant By Exemption

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

End of life manual availability	End of Life Information
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins